

What is claimed is:

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1. An electronic camera apparatus for reading out,
2 from an image sensing device, an image signal which
3 represents a color image constructed by a number of
4 pixels to which predetermined colors are assigned and
5 has pieces of luminance information with analog values
6 representing luminances of the pixels, the luminance
7 information being discrete on a time axis, and
8 generating a desired image from the image signal,
9 comprising:

10 a luminance correction section for generating
11 individual correction coefficients from a plurality of
12 correction coefficients in units of pixels, correcting
13 corresponding luminance information in the image signal
14 on the basis of each correction coefficient, and
15 outputting a new image signal used for image generation.

2. An apparatus according to claim 1, further
2 comprising a luminance correction section connected in
3 series with the image signal.

3. An apparatus according to claim 1, wherein
2 said luminance correction section comprises
3 a correction control section for sequentially
4 generating a luminance correction amount corresponding
5 to each pixel from the plurality of correction

6 coefficients on the basis of a clock signal synchronized
7 with each luminance information in the image signal, and
8 a luminance correction amplification section
9 for switching a gain in accordance with the luminance
10 correction amount sequentially generated by said
11 correction control section to amplify the input image
12 signal by a gain corresponding to each luminance
13 correction amount in units of luminance information, and
14 outputting the new image signal.

4. An apparatus according to claim 1, wherein
2 said luminance correction section comprises
3 a first correction control section for
4 sequentially generating a luminance correction amount
5 corresponding to each pixel from a plurality of first
6 correction coefficients on the basis of a clock signal
7 synchronized with each luminance information in the
8 image signal,
9 a second correction control section for
10 sequentially generating a luminance correction amount
11 corresponding to each pixel from a plurality of second
12 correction coefficients on the basis of a clock signal
13 synchronized with each luminance information in the
14 image signal, and
15 a luminance correction amplification section
16 for setting a synthesized gain as a product of a first
17 gain corresponding to the luminance correction amount

18 sequentially generated by said first correction control
19 section and the luminance correction amount sequentially
20 generated by said second correction control section to
21 amplify the input image signal by the synthesized gain
22 corresponding to each luminance correction amount in
23 units of luminance information, and outputting the new
24 image signal.

5. An apparatus according to claim 1, wherein the
2 plurality of correction coefficients are formed from
3 luminance correction amounts in units of predetermined
4 colors assigned to the pixels, and

5 said luminance correction section sequentially
6 selects and uses the luminance correction amounts
7 corresponding to the colors assigned to the pixels as
8 the individual correction coefficients in units of
9 pixels.

6. An apparatus according to claim 1, wherein the
2 plurality of correction coefficients are formed from
3 luminance correction amounts corresponding to coordinate
4 positions defined by two-dimensional coordinates on the
5 color image, and

6 said luminance correction section sequentially
7 selects and uses the luminance correction amounts
8 corresponding to the coordinate positions of the pixels
9 as the individual correction coefficients in units of

10 pixels.

7. An apparatus according to claim 1, wherein the plurality of correction coefficients are formed from luminance correction amounts corresponding to coordinate regions defined by two-dimensional coordinates on the color image, and

said luminance correction section sequentially selects and uses the luminance correction amounts corresponding to the coordinate regions to which the pixels belong as the individual correction coefficients in units of pixels.

8. An apparatus according to claim 1, wherein the plurality of correction coefficients are formed from axial luminance correction amounts representing two correction distribution characteristics changing in axial directions of two coordinate axes that form two-dimensional coordinates set on the color image, and

said luminance correction section refers to corresponding axial luminance correction amounts in units of coordinate axes on the basis of coordinate positions of the pixels and sequentially generates the luminance correction amounts corresponding to the pixels from two obtained axial luminance correction values.

9. An apparatus according to claim 1, wherein the

2 plurality of correction coefficients are formed from
3 axial luminance correction amounts representing two
4 correction distribution characteristics changing in
5 axial directions of two coordinate axes that form
6 two-dimensional coordinates set on the color image, and
7 said luminance correction section refers to
8 corresponding axial luminance correction amounts in
9 units of coordinate axes on the basis of coordinate
10 positions of the pixels and sequentially generates and
11 uses products of two obtained axial luminance correction
12 values as the luminance correction amounts corresponding
13 to the pixels.

10. An apparatus according to claim 1, wherein the
2 plurality of correction coefficients are formed from
3 axial luminance correction amounts representing two
4 correction distribution characteristics changing in
5 axial directions of two coordinate axes that form
6 two-dimensional coordinates set on the color image, and
7 said luminance correction section refers to
8 corresponding axial luminance correction amounts in
9 units of coordinate axes on the basis of coordinate
10 positions of the pixels and sequentially generates and
11 uses sums of two obtained axial luminance correction
12 values as the luminance correction amounts corresponding
13 to the pixels.